The current market environment, with historically low yields across developed markets, presents a challenge to investors with portfolios benchmarked to common aggregate indices, which have relatively long durations (that is, high interest rate sensitivity). Moreover, despite the upward-sloping shape or “term premium” normally available to fixed income investors, the duration of most popular fixed income benchmarks is suboptimal when considering risk-adjusted returns using a Sharpe ratio.

Unconstrained bond strategies offer investors a solution to both aforementioned problems. Without the “anchoring” of traditional benchmarks, skilled fixed income managers have more freedom to deliver optimal risk-adjusted returns across different market environments.

We compare correlations of the unconstrained universe, along with several other universes that have common benchmarks, to the key risks factors present in fixed income markets (rates, credit spreads and rate volatility). The results confirm that unconstrained strategies appear to have less interest rate duration than those benchmarked to common indices but also have more sensitivity to credit spreads.

Investors should consider this trade-off in risks (credit in lieu of interest rate risk), and the fact that unconstrained strategies are unlikely to provide the same diversification to other asset classes, before supplanting benchmark-relative allocations with unconstrained bond strategies.
WHAT ARE UNCONSTRAINED BOND STRATEGIES?

Unconstrained bond strategies are simply those managed without traditional index or benchmark constraints (for example, Barclays Aggregate Index). These strategies provide the flexibility to invest across fixed income sectors, geographies and currencies. Although unconstrained strategies are expected to have net-long fixed income market exposure (beta) over a market cycle, managers are free to express a short view (short interest rate duration or credit spread duration). Since unconstrained strategies offer an ostensibly broader opportunity set without the undue influence or “anchoring” of traditional benchmarks, they allow skilled managers more freedom to deliver optimal risk-adjusted returns across different market environments (for example, rising rates, widening credit spreads, high currency volatility).

WHY CHOOSE UNCONSTRAINED NOW?

Several reasons exist for investor interest in unconstrained strategies, but the recent proliferation and success of these funds are mostly due to the current interest rate environment. The decades-long secular decline in interest rates across developed economies, which has been a major boon to fixed income total returns over the years, appears to have reached its lower bound (see the historical 10-year Treasury yield chart in Figure 1). If yields did begin an upward trend, returns to bond investors would be materially adverse. Since most common fixed income benchmarks have durations over five years (the Barclays US Aggregate and Global Aggregate durations are currently 5.9 and 7.1 years, respectively), it implies a negative price return of approximately 5% for every 1% increase in interest rates.

Since unconstrained bond managers have the freedom to maintain lower duration (or even negative duration) through a rising rate cycle without fear of increased tracking error to benchmark, they can mitigate the impact of interest rate increases on portfolio price return. Moreover, most unconstrained portfolio managers tend to maintain a lower average duration than a typical benchmark through a market cycle, which can be rationalized by examining the risk/reward tradeoff across the yield curve.
In addition to fears of the impact of an imminent rising rate environment, the duration of most popular fixed income benchmarks is suboptimal when considering risk-adjusted returns. This is highlighted in Figure 2, which shows the modified Sharpe ratio of each tenor on the US swap curve. We modify the traditional Sharpe ratio by using yields as a proxy for excess return (yields dominate fixed income total return in the long run) and compare these average yields to price volatility over the past 10 years (swaps are linear instruments with minimal convexity, so interest rate duration accounts for virtually all of the price movement). The results show a strong downward-sloping relationship between duration/maturity and the Sharpe ratio. What is surprising — at least at first glance — is the steepness of the slope in the first few years of the curve. Between the one-year maturity swap and five-year maturity swap, the modified Sharpe ratio drops by almost an entire point. Therefore, investment managers using the Barclays US Aggregate as a benchmark for multi-sector mandates are (by design) starting from a suboptimal portfolio.

The duration of most popular fixed income benchmarks is suboptimal when considering risk-adjusted returns.
Regardless of the duration of popular indices used as benchmarks, the construction methodology is also often inefficient. Market capitalization weights have historically been standard industry practice for indexing. Although traditional academic theory supports the market capitalization approach and posits that it is mean-variance efficient, more recent studies suggest that it leads to underperformance. This is at least partly due to the fact that the most indebted countries and corporations become the biggest index constituents. Moreover, given issuance patterns since the global financial crisis, these indices are increasingly concentrated in developed market sovereign issuers at very low yields (over 73% of the US Aggregate is composed of Treasuries, Agencies and Agency MBS).
WHAT ARE THE RISKS AND LESSONS LEARNED OVER TIME?

Unconstrained is a relatively new concept for most fixed income firms. As a result, the universe is largely untested with regard to its response to market regime changes, such as a secular rising rate environment. In order to capture the risk profile of this universe (which, by definition, does not have a benchmark or “model” portfolio to analyze), we look at the underlying market forces that would have affected fixed income portfolios of all sorts and apply this methodology across all investment universes over the past three years. In place of a typical market benchmark, we use variables that capture important characteristics of interest rates, default risk and fixed income market volatility. We compare the correlation of strategy universes against changes in: (i) interest rates, (ii) investment grade credit spreads and (iii) implied volatility in interest rates. The following variables were used:

- Change in monthly rates: This variable is the five-year US LIBOR Swap rate. We used the change in this rate (always, to create “duration”-like effects) in our analysis. Remember that this is only one point on the curve and therefore does not provide a textbook interest rate duration for these universes (duration calculations require a parallel shift to the entire curve).

- Change in monthly investment grade spreads: We used Barclays US Corporate Investment Grade OAS. We took the monthly change in spread in the analysis.

- Change in monthly swaption volatility: This is the one-year by 10-year swaption volatility in basis points converted to percent; correlations reflect universe returns to a 1% change in interest rate volatility.

The analysis results, which are displayed in Figure 3, highlight the risk profiles of 12 common fixed income universes over the past five years, including unconstrained bond. The results indicate a clear trade-off between interest rate duration and spread duration when comparing unconstrained bond to other common universes (US Core, US Credit, Global Broad Market Aggregate). For example, unconstrained has exhibited only 1.83 years of interest rate duration versus 3.98 in US Core (using only the five-year swap as a proxy for the entire curve). This seems to confirm the most popular reason for the success of unconstrained — that these strategies are expected to outperform most traditional benchmark-relative equivalents in a rising rate environment. However, the spread duration of unconstrained is also much higher than that for US Core (but materially lower than other high risk/return universes, such as high yield and emerging market debt). Therefore, unconstrained investors seeking protection from one risk (rising rates) are likely taking more of another risk (default/credit). In other words, there is no free lunch in fixed income; managers that forgo the term premium in an upward-sloping curve must supplant that lost yield with additional credit risk.
It is important to remember that, although we agree that unconstrained strategies offer a better solution to a market environment of rising rates and allow for a pure expression of portfolio manager views, fixed income allocations do not exist in a vacuum. Fixed income serves many strategic roles in client portfolios (for example, income, liquidity, liability hedge). For some investors, the most important feature of fixed income is its ability to diversify returns of other common risk asset allocations (equity, real estate, alternatives). This is especially true in times of market stress — in 2008, US Treasuries were the only major asset class that did not experience a drawdown! This diversifying feature of fixed income is manifested in duration. The other major risk factors present in fixed income securities are positively correlated with other risk assets (credit spreads, rate volatility, liquidity risk). Given the recent nature of this style of investing, it is perhaps too early to comment on performance and correlations in a distressed market, but we do not expect the same flight-to-quality benefits as those exhibited by common index benchmarks with high allocations to developed-market sovereign securities. That said, for long-term investors focused on total return potential within fixed income, we find unconstrained an improvement over traditional benchmark-relative strategies. The active return opportunities dramatically increase by allowing duration, sector and security decisions to be made without the undue “anchoring” of common benchmarks.

Unconstrained strategies offer a better solution to a market environment of rising rates and allow for a pure expression of portfolio manager views. However, fixed income allocations do not exist in a vacuum.
For further information, please contact your local Mercer office or visit our website at www.mercer.com.

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